

MODIS TECHNICAL TEAM MEETING

July 22, 1999

Vince Salomonson chaired the MODIS Technical Team Meeting. Present were Ken Anderson, Francesco Bordi, Wayne Esaias, Al Fleig, Dorothy Hall, Chris Justice, Gene Legg (NOAA), Bob Murphy, Eric Vermote, and Bruce Vollmer with Deborah Howard recording the minutes.

1.0 SCHEDULE OF EVENTS

SAFARI Program Implementation Meeting (Gaborone, Botswana)	July 26–30, 1999
Next PI Processing Meeting (GSFC) Location TBD	September 8, 1999
Terra Launch Vandenberg Air Force Base	No earlier than September 13, 1999
Next MODIS Science Team Meeting (GSFC-area) Location TBD	October or November 1999
AGU 1999 Fall Meeting (San Francisco, CA)	December 13–17, 1999
IGARRS 2000 Abstracts Due	December 1999
AGU 2000 Spring Meeting (Washington, DC)	May 30–June 3, 2000
IGARRS 2000 (Honolulu, HI)	July 24–28, 2000
EOS-PM Launch	December 2000

2.0 MINUTES OF THE MEETING

2.1 Science

Chris Justice reported on Land group 250 meter production issues. He said that the Land group has discussed how to increase the global coverage of Land products during the early phase of the mission. This is in response to a recommendation from the SEC committee at the EOS IWG meeting in June. He will seek support to make 250 m products in an ESIP. Justice said that the Land group would distribute those products through the Web FTP (both push and pull) rather than through the DAACs.

2.2 L1 Integration

Bordi reviewed highlights of MODIS L1 Integration status dated July 22

(Attachment 1). Level 1A and geolocation (Drop 5A) is scheduled to be delivered to the DAAC on Aug 6.

Bordi reviewed the list of MODIS L1 integration issues. He reported some concern over whether MODIS should prepare a Level 1 backup system (item #1). This issue is pending an assessment of MOSS-2 dry run results. Although the schedule for resolution of ECS problems at the DAAC was updated by Mike Moore (ESDIS) last week (item #2), it remains open until items on the schedule are received from ECS. The issue regarding ECS generation of an ESDT for the L1A subsetter (PGE71) (item #3) was resolved. The Level 1A subsetter (PGE71) has been completed and sent to the DAAC. Vollmer verified that the L1A subsetter has arrived at the DAAC. The date for DAAC testing with ECS release 5A (known as EGS 10) is August 23 (item #6). Item #7, regarding prioritization of PGEs, was resolved. External data (GDAS) should be fixed by July 30; Bordi will find out what the specific schedule is for delivery to Landover and to the DAAC. Configuration management (CM) at the DAAC for MCST rapid deliveries (item #9) is closed because MCST direct delivery to the DAAC is unnecessary if processing through SDST remains fast (4 hours). Bordi said that Murphy would review establishing the policy and process to release Level 1 software to the public (item #11). MCST is requesting that ECS generate a new ESDT for Level 1B (item #12).

Justice asked about QA and Bordi replied that QA for Level 1B will continue to be tracked. There is no QA on Level 1A. Justice said that QA for Level 1B would be of interest to the Land group.

2.3 SDST

Al Fleig showed the Granule Image (Tic-tac-toe chart) of the most recent test data (for synthetic data day 226). All that was missing was some ancillary data and hours 2 through 4. Overall, he said that SDST is pleased with the progress that is being made. He briefly reviewed the fever chart and pointed out the increasing "green" or completed status. For example, he said that cloud mask (PGE 06) is now in production although it has a minor problem that would be fixed by September. (See Attachment 2.)

Salomonson asked how status would look if launch were next week. Fleig replied that all Level 1 and many Level 2 products look good and that SDST could insert some products into the archive; some are still waiting for changes from ECS. He said that they could produce quite a lot at this point. Salomonson asked whether that included producing "first look" images (e.g., images of the East Coast or West Coast of the U. S.) and Fleig said it would. Vermote and the Land group have demonstrated that capability. Vermote said he was able to order 10 granules of data from over central Africa from the DAAC recently. Also, Vermote brought a night-time image of surface temperature product that he showed to the group. Dorothy Hall asked Fleig whether SDST had thought about a timeframe for post-launch products. Fleig said he would get back to her with an answer. Fleig asked how much support and testing SDST should provide to NOAA's "bent pipe" production system. Salomonson and Legg

agreed that would be NOAA's responsibility.

2.4 Instrument Report

Ken Anderson reported that thermal vacuum testing would be completed soon. They have collected data in order to better understand the thermal problems. IAC data is being treated as the truth for nominal, hot and ambient on-orbit temperatures. The second thermal cycle will be completed tomorrow (July 23). Then one more cycle will be done to check stability. This thermal vacuum cycle should be complete by August 3 or 4. Registration between the two warm focal planes is within spec (0.2 1 km pixels). The same is true between the two cold focal planes. The greatest misregistration is between the short to midwave and the visible bands. Salomonson asked whether that would affect the co-registration among the 500 bands (3-7). Murphy said that he expects problems between bands 3 and 4 on the visible focal plane and 5-7 on the short to mid-wave focal plane. In response to a question, Anderson said that there is some variation in the misregistration as a function of the instrument temperature, but that it was not significant (about 1 degree C). For the on-orbit instrument lifetime, the predicted temperature extremes for MODIS, from coldest cold to hottest hot, is approximately 8 degrees C. Justice said he would like to wait for more information before examining how misregistration would affect both standard and experimental products.

Murphy asked how much time would be needed between the end of thermal vac and consent to ship; Anderson said he would want a month. Justice commented that its important to consider two issues—understanding the misregistration and characterizing it.

Esaias commented that the Oceans group uses data from the warm focal planes for some algorithms and from the cold focal planes for others. No algorithms use both. Therefore, they could work with a misregistration problem. However, he wanted to know whether over the life of the mission, we could assess this on orbit. Anderson replied that between SRCA and ground targets we could assess that on orbit and assess the impact on long-term data sets.

2.5 GDAAC

Vollmer briefly reviewed the GDAAC Notes for MODIS Technical Team Meeting dated 7/22/99 (Attachment 3). He said that the DAAC had received 18 hours of S/C data from EDOS , which is a significant improvement over what they have received in the past. Murphy asked how much down time the DAAC had in the process. Vollmer replied that initially there were many gaps in the data. However, it was more continuous data so less time was needed to stop and clean up gaps and restart. Vollmer noted that the versions of PGEs in Ops and test modes are listed in the chart at the bottom of the Attachment.

Salomonson stated that the DIS Project had extended congratulations in Center Mission Status Reviews to the DAAC for the progress it is making overall.

2.6 Snow and Ice

Hall said that she attended a recent Global Land Ice Measurements from Space

(GLIMS) meeting at the National Science Foundation (NSF). Participants from NSF, USGS, NASA, and NOAA attended the meeting and discussed why small glaciers were not included in EOS. Program managers agreed to discuss issuing an Announcement of Opportunity (AO) in FY 2000.

2.7 Oceans

Esaias announced that a new Oceans QA person has started work, who will assume a liaison role between MODAPS and Miami. Second, he announced that MOBY's second anniversary is next Tuesday, July 27. He said it has been very reliable and economical. Third, Esaias said that the cruise still is scheduled for October 1 through October 20 on a Scripps vessel. It will be a multipurpose Oceans science and Atmospheres validation cruise. Among other things, they will have an M-AERI on board.

2.8 MAST

Salomonson announced that the Earth Observatory has now exceeded 1 million hits for the Earth Observatory Web site at <http://earthobservatory.nasa.gov>. He asked about scheduling the next Science team meeting in October or November 1999. Salomonson also said he had talked with IGARRS' 2000 organizers about scheduling Terra sessions at the IGARRS (meeting will be in Hawaii). They were quite amenable to that idea and will work with the Terra participants to do that. V. Salomonson will be the focal point of contact for these sessions. MODIS could probably present at AGU also.

Murphy said a teleconference on early images with Justice, Esaias, and Bordi ended with a proposal from Dave Diner on a probable series of monthly releases of images without press conferences to be followed by a press conference at launch plus 9 months. MODIS would like to use images of the East Coast of the U.S.

3.0 ACTION ITEMS

3.1 Action Items Carried Forward

1. Masuoka and Kempler: Discuss with Mike Moore the resolution of issues regarding production plan failures at the DAAC when fractured data is received from EDOS and related ECS/DAAC issues.

Status: This item remains open.

2. Legg: Find out when and how NASA MODIS representatives will be integrated into the NOAA review process and report on status to the MODIS Technical Team. NOAA has agreed to have MODIS representatives serve on the NESDIS data product review boards. However, MODIS representatives have not yet been invited to participate in an advisory panel.

Status: This item remains open.

3. Murphy and Conboy: Inputs for the EOS Data Products Handbook PM-1

Volume 2 are due to Barbara Conboy by June 17, 1999.

Status: This item remains open. Conboy is incorporating corrections received from the MODIS Team to-date and awaiting final corrections/input from Bob Murphy.

4. Hohner and Howard: Develop a weekly MODIS news page linked to the MODIS home Web site. It should include hot items and reflect weekly progress.

Status: This item is in progress. Hohner has added a Latest News section to the MODIS home page and has developed a template for the creation of more news pages. The development of the MODIS Instrument News database and Web interface will add functionality to updating and developing related news pages. The development and review of the database and interface mechanism is expected by mid-August with updates to the Latest News pages added on an ongoing basis. In the interim, new news items and pages are welcomed and encouraged. To add a news item or a news page, please contact Michael Hohner at mhohner@pop900.gsfc.nasa.gov or 301-614-6539.

5. Masuoka: Submit an EOS-PM Data Product Update to ESDIS.

Status: This action item remains open.